

AMENDMENTS TO THE CLAIMS:

1. (Previously Presented) A vertebral support apparatus, said apparatus comprising:
first and second spinal rods;
a solid non-hollow shaft, wherein said shaft is solid across the entire cross-section of said shaft and includes no internal cavity;
a first hook including a first internal surface having a curved portion, said first rod contacting said first internal surface; and
a second hook including a first end unitary and integral with the shaft at a position axially displaced from the first hook, said second hook terminating at a second end spaced laterally from the shaft and comprising a second internal surface having a curved portion including a raised ridge extending along said curved portion in a direction from the first end to the second end, wherein said second rod contacts said ridge,
wherein said shaft includes a first threaded hole associated with said first hook, and a set screw extends through said first threaded hole contacting said first rod and forcing said first rod against said first internal surface; and
wherein said shaft includes a second threaded hole associated with said second hook, and a set screw extends through said second threaded hole contacting said second rod and forcing said second rod against said ridge.
2. (Original) The apparatus of claim 1 wherein the first end, the second end of the second hook, and the shaft define a first plane and the first hook extends laterally from the shaft along the first plane.
3. (Original) The apparatus of claim 2 wherein the shaft has a round or oval cross-sectional profile.
4. (Original) The apparatus of claim 2 wherein the shaft defines a substantially planar plate.

5. (Original) The apparatus of claim 1 wherein the shaft is curved.

6. (Cancelled)

7. (Original) The apparatus of claim 1 wherein the first hook is secured to the first spinal rod and the second hook is secured to a second spinal rod, wherein the first spinal rod and the second spinal rod are positioned to lie non-parallel to each other.

8. (Original) The apparatus of claim 7 wherein the first spinal rod and the second spinal rod are positioned to not lie in the same plane.

9. (Cancelled)

10. (Original) The apparatus of claim 1 formed as a one-piece unit.

11. (Original) The apparatus of claim 1 wherein the internal surface of the first hook comprises a ridge extending along said curved portion.

12. (Previously Presented) A method of treating a spinal deformity, said method comprising:

securing a first spinal rod and a second spinal rod to two or more vertebrae;

providing an apparatus according to claim 1; and

interconnecting the first spinal rod and the second spinal rod by securing the first spinal rod to the first hook and the second spinal rod to the second hook.

13. (Currently Amended) An interconnection apparatus for securing a pair of elongate members, said apparatus comprising:

first and second spinal rods;

a solid non-hollow shaft, wherein said shaft is solid across the entire cross-section of said shaft and includes no internal cavity;

a first hook including a first internal surface having a curved portion configured to at least partly encircle a ~~the first one of the pair of non-parallel, elongate members spinal rod~~; and

a second hook including a first end unitary and integral with the shaft at a position axially displaced from the first hook, said second hook terminating at a second end spaced laterally from the shaft and comprising a second internal surface wherein the second internal surface curves both in a first direction from the shaft to the second end and in a second direction oblique to the first direction, wherein said curves in said first and second directions are overlapping and intersecting to thereby define a raised ridge extending from the first end to the second end, wherein the second spinal rod is locked in contact with said raised ridge, said shaft, first hook and second hook being a one-piece unit.

14. (Original) The apparatus of claim 13 wherein the internal surface curves in a second direction substantially orthogonal to the first direction.

15. (Original) The apparatus of claim 13 wherein the internal surface curves in a second direction at an acute angle to the first direction.

16. (Original) The apparatus of claim 13 wherein the internal surface curves in a second direction at an obtuse angle to the first direction.

17. (Original) The apparatus of claim 13 comprising a first spinal rod secured to the first rod connector and a second spinal rod secured to the second rod connector, wherein the first spinal rod and the second spinal rod are positioned to lie non-parallel to each other.

18. (Original) The apparatus of claim 17 wherein the first spinal rod and the second spinal rod are positioned to not lie in the same plane.

19. (Cancelled)

20. (Cancelled)

21. (Original) The apparatus of claim 13 wherein the first hook includes a first internal surface that curves both in a first direction and in a second direction oblique to the first direction.

22.-30. (Cancelled)

31. (Previously Presented) The apparatus of claim 1, wherein the axial distance between said first hook and said second hook is permanent and non-adjustable.

32. (Previously Presented) The apparatus of claim 13, wherein the axial distance between said first hook and said second hook is permanent and non-adjustable.

33. (Currently Amended) A vertebral support apparatus comprising:
first and second elongated support rods;
a one-piece connector engaging both of said rods, said connector having a solid non-hollow shaft, wherein said shaft is solid across the entire cross-section of said shaft and includes no internal cavity, said connector further having a first hook portion laterally spaced from said shaft and pointing generally along the direction of said shaft and including a first internal surface having a curved portion configured to at least partly encircle a first one of the elongated support rods, said connector further having a second hook portion laterally spaced from said shaft and pointing generally along the direction of said shaft and including a first end attached to said shaft at a position displaced along said shaft from said first hook portion, said second hook portion terminating at a second end spaced laterally from said shaft and comprising a second internal surface having a curved portion including a saddle defining a raised ridge extending along said curved portion in a direction from said first end to said second end,

wherein said first elongated support rod is locked in contact with said first internal surface of said first hook portion, and said second elongated support rod is locked in contact with said raised ridge of said saddle, said first elongated support rod and said second elongated support rod being non-parallel.

34. (Previously Presented) The apparatus of claim 1, wherein said curved portion of said second internal surface curves in a second direction extending obliquely to and intersecting said ridge.

35. (Previously Presented) The apparatus of claim 34, wherein said curved portion of said second internal surface curves in said second direction from a first lateral edge of said second hook to a second lateral edge of said second hook.

36. (Previously Presented) The apparatus of claim 13, wherein said second internal surface curves in said second direction from a first lateral edge of said second hook to a second lateral edge of said second hook.

37. (Previously Presented) The apparatus of claim 33, wherein said second internal surface curves in a second direction extending obliquely to and intersecting said saddle.

38. (Previously Presented) The apparatus of claim 37, wherein said second internal surface curves in said second direction from a first lateral edge of said second hook portion to a second lateral edge of said second hook portion.

39. (New) The apparatus of claim 1, wherein said first and second spinal rods comprise rigid rods that are interconnected to provide a rigid interconnection assembly.

40. (New) The apparatus of claim 1, wherein said second rod is compressed against a crest of said raised ridge.

41. (New) The apparatus of claim 13, wherein said first and second spinal rods comprise rigid rods that are interconnected to provide a rigid interconnection assembly.

42. (New) The apparatus of claim 13, wherein said second rod is compressed against a crest of said raised ridge.

43. (New) The apparatus of claim 33, wherein said first and second elongate support rods comprise rigid spinal rods that are interconnected to provide a rigid interconnection assembly.

44. (New) The apparatus of claim 33, wherein said second elongated support rod is compressed against a crest of said raised ridge.